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Accessibility of the Quality of Public Cultural Services In Cultural Centers and Its Influencing Factors

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ABSTRACT: The supply of public cultural services is the main path to meet the public's public cultural needs, and cultural centers, as an important supplier of basic public cultural services in China, its service quality directly affects the people's sense of cultural accessibility and happiness, and the study of the accessibility of the quality of cultural center services is of great significance in promoting the balanced development of public cultural services and improving service effectiveness. This study takes the cultural center in city Y as an example, constructs the evaluation index system of the accessibility of the public cultural service quality of the cultural center from the dimensions of the accessibility of the input, process, output and effect of the cultural center, and collects data through questionnaires for evaluation and in-depth discussion of the factors affecting the accessibility of the service quality of the cultural center. It is found that the service quality of cultural centers in Y city generally shows a medium match with the public demand, and there is still much room for improvement. To summarize, this study suggests that the differences in the needs of different groups should be taken into full consideration, a demand-oriented service supply mechanism should be established, and the investment of facilities and resources should be increased, so as to promote the high-quality development of public cultural services.

Keywords: cultural centers, public cultural services, supply and demand matching, quality accessibility

I. INTRODUCTION

In recent years, with the rapid economic and social development of China, the people's demand for spiritual and cultural life has been growing, and the supply of public cultural services is the main path to meeting the public's public cultural needs. Public cultural services are services led by the government with the participation of social forces, with the main goal of meeting the cultural life needs of all citizens, and providing public cultural service facilities, cultural activities, cultural products and other services. Public cultural service organizations mainly include libraries, cultural centers, museums, art galleries, memorial halls and so on. As an important part of the public cultural service system, the cultural center bears the important responsibility of providing basic public cultural services and meeting the basic cultural needs of the people, and it is a mass cultural institution at the county and municipal levels, and in some places it is also known as a cultural center and a cultural activity center, and it is an institution that carries out mass cultural activities and provides venues for the masses' cultural and recreational activities. It is funded by the government, is of a public welfare nature, is open to the public, and provides diversified cultural services for groups of different ages. Its main services

include popularizing scientific and cultural knowledge, organizing cultural activities, guiding literary and artistic creation, preserving intangible cultural heritage, providing digital cultural information services, and guiding the work of cultural stations and community cultural centers. As the main venues for the provision of public cultural services, the quality of the services provided by cultural centers has a direct impact on the people's sense of cultural access and happiness. However, due to a variety of factors, such as the level of regional economic development, the distribution of cultural resources, and differences in demographics, the accessibility of the quality of cultural center services varies significantly from region to region and from group to group. In some regions, cultural centers are backward in terms of facilities, single service content and outdated service methods, making it difficult to meet the diversified cultural needs of the people; while in other regions, cultural center services are difficult to cover all the people due to remote geographic location and inconvenient transportation. As a component of the public cultural service system with pillar significance, the cultural center is an important backbone of public cultural services[1], dominating the development of the cultural service system[2], and the improvement of the quality of service accessibility of cultural centers can benefit more grass-roots people. Therefore, studying the accessibility of cultural center service quality can promote cultural centers to provide service contents and methods that are closer to the needs of the people, enhance the people's satisfaction and recognition of public cultural services, and then improve the sense of cultural access and happiness, which is of great significance in promoting the balanced development of public cultural services and improving service effectiveness.

This study takes the cultural center of City Y as a microcosm, investigates and understands the accessibility of the quality of service supply of grassroots public cultural service institutions in developed cities in China, i.e., the degree of matching between the quality of service supply and the demand for the service, analyzes the factors affecting the accessibility of the quality of service of the cultural center of City Y, and puts forward suggestions and measures to enhance the accessibility of the quality of service, with a view to providing experience for other grassroots cultural centers and other public cultural service institutions to learn from. The aim is to provide lessons for other grassroots cultural centers and other public cultural service organizations, and to improve the effectiveness and satisfaction of public cultural services.

II. LITERATURE REVIEW AND EVALUATION

The construction of a public cultural service system is an important part of the national cultural strategy, the aim of which is to satisfy the growing spiritual and cultural needs of the people and to promote the improvement of the cultural quality of the entire nation through the provision of a wealth of cultural products and services. As an important institution providing public cultural services, the accessibility of cultural centers is an important indicator of the level of public cultural service system construction in a region. The so-called "accessibility" refers to whether or not the services can be easily and unobstructedly accessed by the target groups. The accessibility of cultural centers includes not only convenient geographical location and reasonable service hours, but also the diversity of service contents and the innovation of service methods. In recent years there has been a gradual increase in research on the accessibility of public cultural services, especially under the guidance of national policies, and governments at all levels and academic institutions are actively exploring how to improve the accessibility of public cultural services through a variety of means, including policy, technology and management.

1. Factors affecting the accessibility of public cultural services

The accessibility of public cultural services is the "suitability" between public cultural services and the audience, i.e. the match between the supply and demand of public cultural services, which involves the time, distance and convenience of the audience to receive the services, and the degree of match between the content of the services and their own needs[3]. The accessibility of public cultural services can be comprehensively assessed from four dimensions: availability, approachability, acceptability and adaptability. Yanqing Dai,Meimei Li have analyzed the key factors affecting the accessibility of public digital cultural services through structural equation modeling and explored their role mechanisms on the sense of cultural accessibility. Their research not only reveals the importance of service accessibility, but also points out the moderating role of public participation in it[4]. In addition, a theoretical analysis framework was constructed based on the TOE model to analyze and enhance the accessibility of rural public digital cultural services. The study emphasizes the impact of the three dimensions of technology, organization and environment on service accessibility and proposes specific enhancement strategies[5]. The evaluation of the quality of public cultural services can start from two aspects: process quality evaluation and perceived quality evaluation. Process quality evaluation is based on the amount of public service inputs and the objective performance it produces, focusing on managing quality from the perspective of the provider, such as staff ratios, facility standards, and site area standards. Yuejuan Cao through a structural equation model found that infrastructure and supporting services have a significant positive effect on the perception of service quality, which indicates that the physical environment and supporting services are important factors in improving accessibility[6]. Perceived quality evaluation considers people's subjective

feelings as an effective basis for judging service quality, and the focus of attention is on the quality that can be perceived by users. Yijin Chen and Shujin Cao constructed a user-centered evaluation model of public cultural service quality, proposing that evaluation from a user perception perspective can effectively address the mismatch between the supply and demand of public cultural services, thereby enhancing accessibility. The study highlights the important impact of service quality dimensions on user satisfaction and provides an effective tool for assessing the quality of public cultural services[7].

2. Study on the path of improving the accessibility of public cultural services

A number of scholars have provided valuable theoretical support and practical guidance on the optimization of public cultural service accessibility from different perspectives. Shuhua Hu [8] emphasizes the necessity of service effectiveness enhancement and points out specific operational methods, such as optimizing the service process, improving the quality of service, and enhancing the interactivity of service, aiming at improving the accessibility of public cultural services by improving the intrinsic mechanism of the service to make them closer to the people's needs. Juan Luo [9] focuses on the realization mechanism of rural public cultural service accessibility in the context of digital village construction. Constructing the process analysis framework of "input-transformation-output-feedback", she analyzes how digital technology runs through all aspects of rural public cultural service accessibility, and points out the intelligent construction path to improve the accessibility. The study also points out the intelligentization construction path to improve the accessibility of the service. Li-Ying Zhao and Yu Dong [10] constructed an evaluation index system of public satisfaction with public cultural services through the Delphi method and other methods, and provided specific paths to improve satisfaction through empirical research. The study emphasizes the importance of optimizing service content and strengthening facility construction, and provides empirical support for improving public satisfaction of public cultural services through actual data analysis.

3. Problems prevailing in the quality of cultural provision in cultural centers

At present, most scholars have summarized the current situation of service quality of cultural centers in different parts of China from a macro and qualitative perspective. First of all, in terms of quality demand, Shanghai's community cultural centers are already struggling to meet the public's demand for diversified, high-quality and socialized public cultural services, while public cultural institutions such as cultural centers in Qingdao and Jinan are still in the safeguard stage, relying mainly on the government-led "Five Cultural Beneficial Projects" to provide basic services. This suggests that cultural centers are still in the quality demand stage. This indicates that there are obvious regional differences in the quality demand for cultural centers, with developed regions having higher requirements for the quality of service, content richness, and personalized provision of cultural centers, while less-developed regions pay more attention to the guarantee of basic services (Guo Jianxiong, 2018)[11]. Compared to rural areas, urban community residents are less satisfied with the accessibility of cultural centers, mainly in terms of the diversity of cultural activities and the adequacy of service personnel, while there is a need to enrich the types of facilities and configure more accessible facilities according to the nature of the community and the characteristics of the residents (Yin Jiao et al., 2023)[12]; in terms of accessibility, there is currently an incongruity between the supply of and the demand for public cultural services, and the government's provision of cultural products and services often lack attractiveness, applicability, and a sense of innovation, resulting in the underutilization of public cultural facilities such as cultural centers (Jiang Zhulang, 2010)[13]. The lack of footwork of grassroots cultural staff leads to the inability to take steps to reach out to the masses to understand their needs, while the lack of publicity for cultural centers makes the masses less aware of cultural centers (Liu Wenhua, 2021)[14]. These problems reflect that cultural centers still face many challenges in terms of quality of supply and accessibility, which are manifested in the following aspects: first, in terms of facilities for cultural activities, there is the problem of insufficient facilities. Some county and city-level cultural centers are in a state of lack of cultural activity facilities due to insufficient funding and poor maintenance, and lack the necessary security facilities in the organization of activities (Li Dongsu, 2019)[15]; cultural centers at all levels have the problem of low utilization of facilities and equipment to varying degrees in different regions in the provision of public cultural services (Lu Jixing, 2018)[16]; and due to insufficient funding for cultural funding, economically underdeveloped areas invest less in the infrastructure of cultural centers, which cannot meet the needs of the masses for cultural development, and there is the problem of low utilization rate due to the imperfection of the infrastructure in regions with a higher level of economic development (Yu Bijun, 2020)[17]. Second, the professionalism of the service team is insufficient. The structure of the talent team within the cultural center is unbalanced, the staff are mostly graduates of local secondary schools or staff of restructured art troupes, and there is a lack of highly educated talents, especially those who graduated from formal institutions of arts and culture (Chen Kun, 2020)[18]; the professional team of the cultural center is complex, with the arrangement of work transfers, the allocation of fresh graduates, and the direct transfer of staff from the troupe, and the imbalance in staffing has led to a decrease in the capacity and level of cultural services capacity and level decline (Zhou Xi Ru, 2019)[19]. Third, the service content and form are single and backward. The contradiction between the limited and basic nature of free open resources of cultural centers

and the diversity and hierarchy of the masses' cultural needs is increasing (Liu Jiayi, 2020)[20]. Fourth, the cultural counseling is insufficient, the cultural counseling work for the public focuses on cultural education and propaganda, lacks the examination of the public's acceptance, the counseling work is in the form of form, and the feedback channel is single (Fan Junli, 2019)[21].

4. Synthesis of evaluations

At present, most of the domestic scholars point out from the qualitative point of view that our cultural centers in the service of the masses in the cultural work of the common problems, and for these problems one by one to put forward a theoretical and feasible improvement measures. But there are also the following problems, one is the lack of service quality research for specific regional cultural centers, our country is divided into three regions: east, middle and west, the local cultural centers in different regions in the service of the problem is not exactly the same, for example, the eastern region of the economy is relatively developed, the cultural centers of the capital investment is relatively more, the lack of funds should not be the reason to affect the effectiveness of service in the eastern region of the cultural centers, so the national cultural center problems can not be summarized in general terms. Therefore, the generalization of the problems of the national cultural centers cannot be applied to a specific cultural center, and it is not a reference for the solution of the problems. Secondly, there are few studies on the evaluation of the accessibility of the service quality of cultural centers. Inputting "public cultural service" and "quality accessibility" into China Knowledge Network, only 66 related documents appeared, and only 18 related documents were published in 2024, which shows that domestic research in the field of public cultural service accessibility is not mature, but the research in this field shows a rising trend. However, the research in this field shows a rising trend, which shows that the quality of public cultural services is becoming more and more the focus of research and attention in the field of public cultural services. The research in the field of public cultural services pays more attention to the cultural services provided by public libraries, and less attention is paid to the research on the service quality of cultural centers. As an important position for grass-roots mass cultural activities, cultural centers should be given more attention in terms of matching the quality of their services. Thirdly, more objective quality evaluation and measurement methods have not yet been found. As mentioned above, different scholars use different indicator systems for public cultural service evaluation, the evaluation indicators of public cultural service accessibility are subjective, and the rationality of indicator selection and standards is tested [22].

III. EVALUATION OF THE ACCESSIBILITY OF THE QUALITY OF SERVICES PROVIDED BY CULTURAL CENTERS IN Y CITY

(i) Overview of Y City Cultural Center

Established in 1956, Y City Culture Center is a public cultural service institution approved by the state, and currently has two premises with a total area of over 8,000 square meters, containing more than 30 activity venues, including a comprehensive performance hall, rehearsal hall, lecture hall, art exhibition hall, cultural sharing project center, and a national school hall. The center is equipped with digital equipment, such as a digital phonograph, which provides the public with audiobooks to read; a public culture all-in-one machine that provides sharing classroom courses in multiple fields to share; a computer room that can be used for online Internet access and online learning for the elderly; a wisdom wall located at the entrance of the cultural center, which provides online and offline cultural resources guides and data information on the number of events held, the number of people, and so on... ...Y Municipal Culture Center is an important position and demonstration window for public cultural services in Y Municipality, and has been honored with the titles of "National Level Culture Center" and "National Outstanding Culture Center" for many times.

As the "leader" of mass culture in Y City, Y City Cultural Center has created a large number of popular cultural and artistic works, undertaken a variety of cultural activities with characteristics, and formed a number of public welfare brand cultural activities. Firstly, public welfare cultural performances, the cultural center regularly organizes various resources such as performances on the stage, featuring "the cultural center sets up the stage, the people as the protagonist", creating a cultural performance stage for the general public to entertain themselves and express themselves. The cultural center makes full use of its own venue to build a "free stage" with complete lighting, stage and sound, attracting citizens with artistic skills and amateur cultural teams to sign up for performances. Activities are held once a week, and about 50 performances are organized each year. Second, public welfare cultural exhibitions. The Cultural Center organizes more than ten public welfare exhibitions each year, covering intangible cultural heritage, art, photography and other artistic disciplines, all of which are open to the public free of charge. The exhibitions focus on the participation of the masses in the creation of exhibitions for the general public; inheritance of Lingnan culture, displaying the wonderful intangible cultural heritage; reflecting the characteristics of Guangdong, for local artists to build a platform for display. Third, public cultural training. The Cultural Center has set up the "People's Academy" public art training courses, non-heritage classes, cultural center station business training courses, the National Education Lecture Hall, cultural volunteers public classroom, the popularization of art lectures for all people, creative guidance,

tutoring and other lectures or tutoring activities. Enrolment is carried out in the form of training courses, providing art training, cultural knowledge popularization, art guidance and exchange services, and 3-12 activities are carried out each year, effectively enhancing the cultural literacy and artistic cultivation of the public.

Cultural centers provide free space for cultural activities. For example, they provide free rehearsal space. Cultural centers provide free rehearsal space services to model central teams and some mass teams participating in public welfare activities of citywide importance. Citizens are required to make reservations in advance on WeChat and undergo an eligibility check before entering the center for rehearsals, effectively guaranteeing the orderly conduct of rehearsal activities. Free Internet access is also provided, and the cultural center has created a sharing project room program to provide free Internet access for the public, and is actively building a resource platform for mass culture, so that the public can access the cultural information they need at any time and any place. The cultural center also distributes free publicity materials, free distribution of public cultural services, mass cultural activities, intangible cultural heritage protection and other various cultural publications and publicity materials, the public can get them free of charge at the newspaper column at the entrance. The cultural center provides free reading, the cultural center opened a small reading corner, free of charge to provide a variety of professional art magazines, promotional materials and books, newspapers and periodicals reading, the public can also scan the two-dimensional code to read e-books, to enjoy a convenient reading experience.

The Cultural Center conducts various cultural activities. Including parent-child activities, it has a children's activity room, which provides a venue for parent-child activities on a daily basis. From time to time, it provides various kinds of parent-child public welfare activities, such as baking, painting, handicrafts, shadow play, etc., in which it deepens parent-child relationship and promotes parent-child interaction and communication. There are also audio-visual activities, including the Sharing Project Public Culture Machine, the Culture and Art Popularization Kukai Cloud CD player, the Film and Television Gramophone, and the Multimedia Touch Control Machine for the public to experience for free. It also carries out year-round activities such as movie art appreciation, opera and opera appreciation, etc., so that the public can learn more about practical cultural knowledge and gain popularization of art appreciation methods. In addition, there are recreational activities, such as "Our Festivals" during key festivals such as the Spring Festival, the Lantern Festival, Ching Ming Festival, Dragon Boat Festival, etc., and recreational activities, such as drinking tea and enjoying flowers, and wishing for poems, are organized according to the characteristics of the festivals.

(ii) Constructing a system of indicators for evaluating the accessibility of the quality of services provided by cultural centers in Y city.

The accessibility of the quality of public cultural services of cultural centers is a reflection of the public's perception of the degree of match between the quality of public cultural service provision of cultural centers and their own needs, and reflects the public's sense of access to public cultural services provided by cultural centers. According to the four dimensions of input, process, output and effect in the performance evaluation theory, the quality accessibility of public cultural services of cultural centers can be subdivided into four dimensions of input quality accessibility, process quality accessibility, output quality accessibility and effect quality accessibility for evaluation, which are actually the measurements of the input quality supply-demand match, the process quality supply-demand match, the output quality supply-demand match, and the result quality supply-demand match; at the same time, according to the Y City Culture Center's actual situation, from the principle of operability and representativeness of measurement, cultural facilities, personnel security, organization and management, and cultural activities are selected as the first-level indicators for evaluation, in addition to supplementing the service effect indicators constructed by Peng Guifang (2017), and the service supply time indicators affecting the accessibility of the quality of service, in an attempt to improve the quality accessibility evaluation index system.

1. Accessibility of inputs

The Accessible Indicators of Quality of Inputs to Cultural Centers is a multidimensional system designed to comprehensively assess the quality of resources invested in the provision of services by cultural centers, including the floor space of the building, facilities and equipment, and the infrastructure for digital services. The floor area of the building measures the size of the physical space of the cultural center, which is directly related to the number of cultural activities that can be accommodated and the number of participants. Facilities and equipment include exhibition and display equipment, audio and lighting equipment, multimedia equipment, etc., which are the basis for cultural centers to hold various cultural activities. Digital service infrastructures, such as electronic reading rooms, digital libraries, online service platforms, etc., reflect the cultural center's digital construction level and service capacity. Therefore, the area of the activity site, the number of cultural facilities, and the functional completeness of the facilities are selected as the measurement indicators. Data can be obtained by setting the degree of public access to these indicators through questionnaires.

2. Process quality accessible

The accessible quality of the process of public cultural services of cultural centers is the extent to which cultural centers coordinate their resources and match the quality of their personnel services and the quality of their organizational management with the needs of citizens in the process of service delivery.

(1) Accessible quality of personnel services

Strengthening the construction of the cultural center talent team is an important guarantee for the public to enjoy high-quality public cultural services, high-quality talent team can be measured by the number of service personnel number of reasonable configuration, and the staff's level of knowledge, service ability, comprehensive literacy and other aspects. Therefore, this paper selects the number of staff, the professional level of staff, the staff's service attitude, the staff's efficiency as the assessment indicators to measure the quality of staff services and the degree of match of public demand.

(2) Organizational management accessible

The organization and management of public culture by cultural centers includes improving and promoting the implementation of relevant supporting measures, cooperating with social forces, promoting public participation, strengthening the publicity and guidance of services, and coordinating cultural resources. Therefore, this paper selects the disclosure and publicity of information, the solicitation of public cultural needs, and the time of organizing activities set by the public sector as indicators of this dimension, reflecting the degree to which the public's demand and supply match in these aspects.

3. Accessible quality of outputs

Accessibility of output quality refers to whether or not the specific material forms manifested by public cultural services are in line with public demand, which is actually the degree of match between output quality and public demand, and can be evaluated with cultural activity indicators.

Cultural activities are an important element in measuring the accessibility of public cultural services, and generally include mass cultural activities, cultural training, art exhibitions and so on. The number of types of cultural activities, the frequency with which they are organized, the quality of their organization, and digital cultural resources can be used to measure the extent to which the quality of the activities matches public demand.

4. Quality of results accessible

The results of public cultural services refer to the impacts produced by public cultural products or services, which are mainly reflected in the effects of the services. The effect of the service is the gain of the public after experiencing the public cultural service, and it is generally believed that the greater the gain of the public, the better the perception of the quality of the service, which can be measured in terms of the accessibility of the public to the popularization of cultural knowledge, the enhancement of cultural skills, and the enrichment of spare time life.

Table 1 Evaluation index system for matching supply and demand of cultural center services in Y city

Accessible Quality Of Services In Cultural Centers	Dimension	First-Level Indicator	Second-Level Indicator
	Accessible Quality Of Inputs	Quality And Accessibility Of Cultural Facilities	Types Of Cultural Facilities
			Size Of The Event Space
			Functionality Of Facilities
	Process Quality Is Accessible	Accessibility Of Personnel Services	Number Of Staff
			Professionalism Of Staff
			Attitude Of Staff Towards Service
			Staff Efficiency
		Quality Of Organizational Management Is Accessible	Disclosure And Promotion Of Cultural Information
			Call For Cultural Needs
			Duration Of The Event
	Accessible Quality Of Outputs	Accessible Quality Of Cultural Activities	Number Of Types Of Activities
			Frequency Of Activities

		Quality Of Organization Of Events
		Digital Cultural Resources
Accessible Quality Of Results	Accessibility Of Service Results	Upgrading Of Cultural Skills
		Popularization Of Cultural Knowledge
		Enrichment Of Spare Time

(iii) Survey and interviewees

The questionnaire survey was conducted through a combination of online and offline methods. The online channel released the questionnaire to the public through the questionnaire star program, inviting residents or students living in Y city to fill out the questionnaire, and excluding invalid questionnaires to ensure that the responses to the questionnaire reflect the public's impression of the cultural center in Y city as truly as possible; the offline method was conducted by visiting the communities near the cultural center in Y city, obtaining responses to the questions of the questionnaire by means of question and answer sessions. The offline way is to visit the communities near Y City Cultural Center, get the answers to the questionnaires in the form of questions and answers, and collect the degree of accessibility of the community residents to the service quality of Y City Cultural Center, and finally summarize the online and offline questionnaires one by one to form the research data.

In this paper, we conducted offline research on the cultural center in Y city, and interviewed the functional staff of the center to learn about the activities held in the cultural center as well as its venues and facilities, which formed an important source for the research on the quality of service provision in the cultural center.

(iv) Results of the evaluation of the accessibility of the quality of services provided by cultural centers in Y city

1. Descriptive analysis of the sample

A total of 256 valid questionnaires were collected, and the details of the sample are shown in Table 2, in which 39.45% were male and 60.55% were female. In terms of age, 26-35 years old accounted for the highest proportion of 37.34%, followed by 18-25 years old (24.22%), more than 55 years old (14.06%), and retirees accounted for a larger proportion of 20.70%). In terms of educational distribution, bachelor's degree accounted for the largest share of 41.41%, followed by junior college (29.69%), while high school or junior college and junior high school and below accounted for 16.02% and 10.91% respectively.

Table 2 Survey Sample Data

Sports Event	Options	Frequency	Percentage
Gender	Male	101	39.45 %
	Female	155	60.55%
Age	17 And Under	7	2.73%
	18-25 Years	62	24.22%
	26-35 Years	70	27.34%
	36-45 Years	46	17.97%
	46-55 Years	35	13.67%
	55+	36	14.06%
Education	Junior High School And Below	28	10.94%
	High School Or Junior College	41	16.02%
	Three-Year College	76	29.69%
	Undergraduate (Adjective)	106	41.41%
	Graduate Students And Above	5	1.95%
Careers	Business Employee	43	16.80%
	Civil Servant	3	1.17%
	Members Of Social Organizations	9	3.52%
	Staff Of Public Institution	40	15.63%
	Freelancer	29	11.33%
	Individual Business Owner	17	6.64%
	Student	39	15.23%

	Retirees	53	20.70%
	Farmers	8	3.13%
	Unemployment	5	1.95%
	Other	10	3.91%

2. Sample reliability and validity tests

In the scale analysis section, the questionnaire used a seven-point Likert scale to score the services of Y City Cultural Center from 1-7, with the degree increasing from very dissatisfied to very satisfied. A total of 183 of the 256 valid questionnaires involved degree scoring, and the remaining 73 questionnaires were from those who had not experienced Y City Cultural Center, so this paper conducted a scale analysis for the 183 questionnaires.

(1) Reliability test

Table 3 Reliability statistics

Cronbach factor	item count
.931	17

Reliability refers to the internal consistency, stability and reliability of the results of a questionnaire. The higher the reliability coefficient, the more consistent, stable and reliable the results of the test are. Using spss to analyze the questionnaire's 5 dimensions and 17 items, the item Cronbach's Alpha 0.6 or more is credible, Alpha 0.8 or more is high reliability, the questionnaire measurement result Cronbach's Alpha is 0.931, which proves that the results of this research have a very good reliability.

(2) Validity test

Table 4 KMO and Bartlett's test

KMO Number of Sampling Suitability Measure.		.889
Bartlett's test of sphericity	Cardinality of last reading	1498.236
	(number of) degrees of freedom (physics)	138
	significance	.000

In this report, 17 measurement items were selected for validity analysis using SPSS software. the closer the KMO value is to 1, the stronger the correlation between the variables is, and the significance of Bartlett's test of sphericity is less than 0.001, the more appropriate it is to analyze the original variables for factor analysis. The results show that the KMO index is 0.889, and the significance of Bartlett's spherical test is 0.000, so the validity of the data is good.

3. Statistical description of the matching index of service supply and demand

(1) Overall accessibility of service quality

Table 5 One-sample test

Overall accessibility of service quality	number of people	Average (E)	standard deviation	T	significance
	183	5.06	1.298	8.601	0

This paper focuses on analyzing the overall accessibility of service quality, i.e., the match between quality supply and demand, using the SPSS one-sample t-test. The one-sample t-test can be used to test whether the difference between the mean of a single variable and the specified test value is significant.

As shown in Table 5, the mean value of the overall match between supply and demand is 5.06 (equivalent to 7.23 out of 10) at the 0.05 level of significance, and the p-value is 0 less than 0.05, which is highly significant. It can be found that the degree of match between the quality of service supply and public demand in cultural centers in Y city is medium.

（2）Accessibility of the quality of services for each indicator

In this paper, the score of each indicator is obtained by averaging the second-level indicators directly, from which the score derives the degree of matching the supply and demand of each service quality; the second-level indicators corresponding to the first-level indicators are weighted by using hierarchical analysis, and the weight of each second-level indicator is determined, so as to calculate the quality accessibility score of the five first-level indicators. Hierarchical analysis is a decision analysis method used to solve complex problems with multiple objectives. The method combines quantitative analysis with qualitative analysis, and empirically judges the achievement or non-achievement of the relative importance between each measurement objective and criterion. The analysis process is as follows: first of all, the subjective evaluation matrix is constructed, and

experts are invited to compare the degree of importance of the indicators within the five dimensions two by two, and five judgment matrices are constructed; then, the values of the judgment matrices are entered in the MPai data analysis platform, and the square-root method is used to find out the obtained eigenvectors to get the weights of the indicators, and the results are shown in Fig.6.

Next the consistency test needs to be used to determine if there are any logical errors in the constructed judgment matrix, and if it fails, the matrix needs to be reconstructed.

Table 6 Results of AHP hierarchical analysis

matrices	term	eigenvector	weighting	Maximum characteristic root	CI value
1	Size of the event space	2.4663	0.6485	3.0021	0.0018
	Number of facilities	0.8741	0.2289		
	Functionality of facilities	0.4643	0.121		
2	Number of staff	1.1061	0.206	4.2129	0.0714
	Professionalism of staff	0.6871	0.1264		
	Attitude of staff towards service	3.2237	0.5939		
	Staff efficiency	0.4079	0.0749		
3	Call for Cultural Needs	2.7591	0.6493	3.0649	0.0324
	Information Disclosure and Publicity	1.1859	0.281		
	Duration of the event	0.3061	0.0717		
4	Number of types of activities	1.1894	0.221	4.1086	0.0363
	Frequency of activities	0.6045	0.1114		
	Quality of organization events	3.203	0.5897		
	Digital cultural resources	0.4351	0.0806		
5	Cultural Skills Enhancement	0.8741	0.2494	3.0538	0.0266
	Cultural literacy	0.5505	0.1573		
	Spare time enrichment	2.0802	0.5934		

Table 7 Summary of consistency test results

matrices	Maximum characteristic root	CI value	RI value	CR value	Consistency test results
1	3.0038	0.0016	0.51	0.0035	pass
2	4.2135	0.0714	0.88	0.0794	pass
3	3.0648	0.0326	0.51	0.0626	pass
4	4.1086	0.0359	0.88	0.0404	pass
5	3.0537	0.0264	0.51	0.0518	pass

Fig.7 shows the calculation results of hierarchical analysis. For matrix 1, the largest characteristic root is 3.0038, according to the RI table, the corresponding RI value is 0.51, so CR=CI/RI=0.0031<0.1, through the one-time test ; for matrix 2, the largest characteristic root is 4.2135, according to the RI table, the corresponding RI value is 0.88, so CR=CI /RI=0.0811<0.1, through a one-time test; for matrix 3, the largest characteristic root is 3.0648, according to the RI table to find the corresponding RI value of 0.52, so CR=CI/RI=0.0639<0.1, through a one-time test; for matrix 4, the largest characteristic root is 4.1086, according to the RI table to find the corresponding RI value of 0.88, so CR=CI/RI=0.0639<0.1, through a one-time test; for matrix 4, the largest characteristic root is 4.1086, according to the RI table to find the corresponding RI value of 0.88, so CR=CI/RI=0.0408<0.1,pass the one-time test; for matrix 5, the largest characteristic root is 3.0537, according to the RI table to find the corresponding RI value is 0.51, so CR=CI/RI=0.0518<0.1,pass the one-time test.

Table 8 Accessibility and ranking of indicators

Study on the accessibility of the quality of cultural	First-Level Indicator	Second-Level Indicator /supply-demand match (weights)	Score (out of 7)	First-Level Indicator scores	rankings

services	cultural facility	Area of activity space (0.6488)	4.98	5.03	10
		Number of facilities (0.2284)	5.09		7
		Functionality of facilities (0.1228)	5.18		3
	personnel security	Number of staff (0.2060)	5.06	5.23	9
		Professionalism of staff (0.1254)	5.18		4
		Staff service attitude (0.5938)	5.29		1
		Staff efficiency (0.0748)	5.25		2
	Organizational management	Call for cultural needs (0.6492)	4.72	4.74	16
		Information Disclosure and Publicity (0.2777)	4.68		14
		When the event was organized (0.0731)	5.09		6
	cultural activity	Number of types of cultural activities (0.2210)	4.79	4.93	12
		Frequency of organization events (0.1104)	4.59		17
		Quality of organization events (0.5885)	5.07		8
		Digital cultural resources (0.0801)	4.67		15
	Service Effectiveness	Cultural skills upgrading (0.2493)	4.74	5.01	13
		Cultural literacy (0.1573)	4.86		11
		Enrichment of leisure time (0.5934)	5.17		5

Fig.8 shows the average scores of the statistics of each secondary indicator and the scores of each primary indicator calculated according to the weights of the secondary indicators. It can be seen that the degree of match between the public's supply and demand for the five aspects of cultural facilities, personnel security, organization and management, cultural activities, and service effects of the cultural center in Y City is between general and match, with all aspects leaning towards a more matchable degree. As a whole, the quality of personnel services has the highest degree of matching, with 5.23 points, followed by the accessible quality of cultural facilities, with 5.03 points; after that, the accessible service effect (5.01 points), cultural activities (4.93 points); and lastly, the organization and management (4.74 points).

(1) Insufficient number of cultural facilities and space

On the indicators of cultural facilities, the degree of matching is ranked in order of scores from high to low, namely, the completeness of facility functions, the number of facilities, and the area of activity venues, and the overall ranking of the completeness of facility functions is much higher than that of the number of facilities and the area of activity venues, which reveals that the functions of the facilities of the Cultural Center of Y City basically satisfy the needs of the public in general, but there is still a need to improve the number of facilities and the area of the venues. It is understood that the Cultural Center has realized the problem of insufficient venue area and initiated the construction of a new center on the northeast side of Haizhu Lake in 2017. The new center is expected to have a total construction area of 57,000 square meters, which will greatly expand the venue area. The staff of the cultural center said that the city's cultural center will soon be transferred to the new center to carry out activities.

(2)Higher accessibility in terms of quality of personnel services

On the staff service quality indicator, the overall degree of matching of this indicator is at a high level, and the degree of matching is, in descending order, the staff's service attitude, efficiency, professionalism, and quantity, so it can be seen that the public recognizes the cultural staff's service attitude, efficiency, and professionalism, but the cultural centers still need to further increase the number of staff to invest in them.

(3) Weakness in the collection of cultural needs and in the public dissemination of cultural information

On the organizational management indicator, the degree of match for this indicator is at the lowest level among the five level 1 indicators, which shows that the public is not very satisfied with the current state of organizational management of cultural centers. Therefore, cultural centers need to strengthen their organizational and management capabilities and actively and widely solicit public opinion in order to improve management effectiveness and service quality. The degree of matching between supply and demand, in descending order, is the timing of activities, the importance attached to cultural needs, and the openness and publicity of cultural information. This ranking reflects that the public generally believes that cultural centers are more reasonable in arranging the time for holding activities, and can better match the free time of most citizens, but cultural centers have obvious deficiencies in soliciting cultural needs and publicizing cultural information. For this reason, cultural centers need to pay more attention to the public's cultural needs, actively listen to the people's voices, and at the same time increase the publicity of activity information to ensure the timely and accurate dissemination of information.

4) Lower accessibility of cultural activities

On the cultural activities indicator, the overall match between supply and demand shows a relatively

good match. However, from the perspective of each specific indicator, only the quality of the activities organized has reached a level that matches public demand, while the number of types of cultural activities, digital cultural resources and the frequency of activities are in decreasing order, and none of them has reached the standard of a good match. Therefore, cultural centers need to focus on enriching the types of activities, increasing the frequency of activities and guaranteeing the quality of digital cultural resources.

　　5) Weak cultural counseling

　　In terms of the service effect indicators, the order of needs fulfillment is, in descending order, enrichment of leisure time, acquisition of more cultural knowledge, and enhancement of cultural skills. The results of the analysis show that what the public gained most from cultural activities was the enrichment of their spare time, but in terms of the acquisition of cultural knowledge and the improvement of cultural skills, the public generally thought that their gains were relatively limited. Cultural centers need to increase their efforts to offer activities that popularize cultural knowledge and teach cultural skills.

IV. ANALYSIS OF FACTORS AFFECTING THE ACCESSIBILITY OF THE QUALITY OF CULTURAL CENTER SERVICES IN Y CITY

　　(i) Factors affecting the accessibility of the quality of services provided by cultural centers in city Y: an analytical framework

　　Service quality accessibility is a concept that involves the degree of equilibrium between supply and demand, and to analyze the factors affecting quality accessibility should also be analyzed from the supply side and the demand side respectively, with the supply-side factors mainly referring to the process of cultural supply, and the demand-side factors referring to the differences within the different individuals who receive the service.

　　1. Impact of intra-individual differences on service quality accessibility

　　Because of different needs, different individuals will have different evaluations of whether the same service meets their own needs, and the factor that affects the accessibility of service quality at this time is not the quality of service supply, but the differences in individual needs. The objective factors that cause differences in individual demand are mainly gender, age, education and occupation, which means that people of different genders, ages, educations and occupations may have different demands for cultural services, such as men and women, old people and young people, people with higher education and people with lower education, etc., and they may have different preferences and demands for the contents and types of cultural services. In order to verify the hypothesis that the above-mentioned intra-individual differences in gender, age, education, and occupation will affect the accessibility of service quality, this paper will analyze whether there are significant differences in service quality accessibility between the gender, age, education, and occupation of the samples, and if the difference reaches a significant level, then it is assumed that this individual factor affects the accessibility of the service quality of the cultural centers of Y city, and vice versa.

　　2. Impact of supply factors on the accessibility of service quality

　　Supply factors are mainly related to the impact that the process of supplying services may have on the accessibility of service quality, and the research of demand for activities, the production and design of activities and the public dissemination of information about activities are all essential parts of the supply process.

　　(1) Impact of research on demand for activities on the accessibility of service quality

　　Activity demand research is a necessary part before activity production design, and it is generally believed that conducting activity demand research can better understand the public's preference for cultural services, and help cultural service organizations to offer cultural activities in a more targeted way to meet the needs of the general public. Therefore, this paper proposes the hypothesis H_1: activity demand research positively affects service quality accessibility.

　　(2) Impact of production design of activities on the accessibility of service quality

　　The production design of an event is a service that can be most perceived by the public in addition to the content of the event itself. Whether or not the process of the event design is reasonably arranged, whether or not there are emergencies, and whether or not accidents are dealt with in a timely manner, etc., directly affects the public's evaluation of the quality of the service, and influences the satisfaction with the supply of the event. Therefore, this paper proposes the hypothesis H_2: the production design of activities will positively affect the accessibility of service quality.

　　(3) Impact of the degree of publicity of activity information on the accessibility of service quality

　　Before organizing the activities, the open publicity of activity information can let more public understand and participate in the activities, reflecting the thoughtfulness of the services of public cultural institutions and the idea of serving the people, so that the public can feel the humanization of the government services, and produce a sense of respect, so as to make a good evaluation of the quality of the services. Therefore, this paper puts forward the hypothesis H_3: the degree of publicity of activity information will positively affect the accessibility of service quality.

　　(ii) Empirical studies

1. Empirical analysis of the impact of intra-individual variation on service quality accessibility
(1) The gender factor does not affect the accessibility of service quality

Table 9 Independent Sample Tests

		distinguishing between the sexes	average value	F	significance	t	degrees of freedom	Significance (two-tailed)
Overall match between supply and demand	Variance chi-square has been assumed	Male (N=73)	5.09	4.328	0.043	0.369	123	0.721
	No assumption of variance chi-square	Female (N=110)	4.89			0.339	79.325	0.738

As shown in Fig.9, analyzed by the independent samples t-test, the p-value of 0.738 is greater than 0.05 at the 0.05 level of significance and there is no difference, indicating that gender does not affect the degree of match in overall service quality.
(2) The age factor has an impact on the accessibility of service quality

Table 10 One-way ANOVA

variant	Source of variation	square sum (e.g. equation of squares)	df	mean square	F	significance
Overall accessibility of service quality	intergroup	39.361	5	7.873	5.431	.000
	within a group	169.643	118	1.46		
	(grand) total	208.998	122			

As shown in Fig.10, by analyzing the ANOVA for different age groups, it was found that the F-value was 5.431, which corresponds to a significance of 0.000, which is less than 0.05, indicating that there is a significant age difference in the matching of service supply and demand of the research participants.

Table 11 Analysis of descriptive statistics

variant	age	numerical value	average value	standard deviation	minimum value	maximum values
Overall accessibility of service quality	17 and under	7	5.81	0.448	5	6
	18-25 years	62	5.08	1.065	3	7
	26-35 years	70	5.39	0.979	4	7
	36-45 years	46	4.11	1.788	1	7
	46-55 years	35	4.36	0.678	3	5
	55+	36	5.51	1.146	4	7

From the results of descriptive statistical analysis in Fig.11, it can be seen that the service quality of the group under the age of 17 has the highest degree of accessibility, followed by the group over 55 years old, and the matching degree of the groups aged 36-45 and 46-55 years old is lower. Combined with the actual research situation, the people entering the cultural center in the nearby community are mostly retired old people and pre-school children, and the old people spend their time helping their children to take care of their children, and the cultural center is just a place to provide leisure activities for the old people and children. The cultural center provides a place for the leisure activities of the elderly and children, and the cultural needs of the elderly and children are less, the cultural center's children's activity room, public welfare performances and other activities basically meet the needs of this group, so the degree of match between supply and demand is higher, and the 36-55 years old age group basically comes to the cultural center to participate in rehearsals, training and other activities in a fixed period of time, and the cultural center understands the cultural center more in-depth, and puts forward a higher degree of requirements. Therefore, cultural centers should improve their services to meet the needs of the 36-45 age group and increase their satisfaction.
(3) Educational factors affecting the accessibility of service quality

Table 12 One-way ANOVA

variant		square sum	df	mean square	F	significance
Overall accessibility of service quality	intergroup	19.877	4	4.971	3.11	0.019
	within a group	189.121	119	1.608		
	(grand) total	208.989	124			

As shown in Fig.12, by analyzing the ANOVA for different academic qualifications, it was found that the F-value was 3.110, which corresponds to a significance of 0.019, which is less than 0.05, indicating that there is a significant difference in academic qualifications in the matching of service supply and demand among the research participants.

Table 13 Analysis of descriptive statistics

variant	education attainment	numerical value	average value	standard deviation	minimum value	maximum values
Overall accessibility of service quality	Junior high school and below	28	4.91	1.051	3	7
	High school or junior college	41	5.85	1.057	3	7
	three-year college	76	4.71	0.793	4	6
	undergraduate (adjective)	106	4.90	1.616	2	7
	Graduate students and above	5	6.00		6	6

From the results of descriptive statistical analysis in Fig.13, it can be seen that the number of people with postgraduate education and above is only 5, and although its matching degree is 6, it is not representative due to the small sample size, while the other educational level is the highest matching degree of senior high school or middle school, and the matching degree of college and undergraduate groups is lower, basically presenting that the higher the educational level, the lower the degree of satisfaction of cultural services. It is generally believed that the higher the level of education, the higher the psychological expectations of the public for cultural services, and once there is a gap between the service results and the expectations, a psychological gap will arise, affecting the level of perceived quality accessibility. Therefore, cultural centers should focus on the cultural needs of highly educated groups and provide cultural services with more cultural content.

(4) Occupational factors affecting the accessibility of service quality

Table 14 One-way ANOVA

variant		square sum	df	mean square	F	significance
Overall accessibility of service quality	intergroup	52.81	12	5.285	3.789	0
	within a group	156.186	113	1.396		
	(grand) total	208.997	124			

As shown in Fig.14, the analysis of variance for different occupations reveals an F-value of 3.789, which corresponds to a significance of 0.000, which is less than 0.05, indicating that there is a significant occupational difference in the matching of service supply and demand among the research participants.

Table 15 Descriptive statistical analysis

variant	careers	numerical value	average value	standard deviation	minimum value	maximum values
Overall accessibility of service quality	business employee	43	5.35	1.074	3	7
	Civil Servant	3	6.53	0.709	6	7
	Members of social organizations	9	4.71	1.635	2	7
	Staff of Public Institution	40	4.09	1.250	1	5

freelancer	29	5.23	1.227	4	7
Individual Business Owner	17	4.05	0	4	4
student	39	5.26	0.881	3	7
retirees	53	5.51	1.143	4	7
farmers	8	4.02		4	4
unemployment	5	4.51	0.709	4	5
other	10	3.46	1.943	1	6

From the results of descriptive statistical analysis in Fig.15, it can be seen that the degree of matching between service supply and demand is relatively high for civil servants, retirees, and enterprise staff, while the degree of matching is low for farmers, self-employed people, and employees of institutions. Combined with the actual interviews, it can be seen that the employees of institutions are the internal staff of the cultural centers or the employees of other institutions, who have a more in-depth and objective understanding of the overall situation of the cultural centers, and are easy to They have a more in-depth and objective understanding of the overall situation of the cultural center, can easily find the deficiencies in the operation process of the cultural center, and have higher expectations of the cultural center's room for improvement, which can explain the low matching degree of the institutional staff.

2. Empirical analysis of the impact of supply factors on service quality accessibility

(1) Construction of the model

Taking personal factors as exogenous variables, this paper considers the influence of factors related to the supply process on quality accessibility, and constructs a path model of the influence of three supply factors, namely, the demand research of activities, the production design of activities, and the public promotion of information about activities, on the accessibility of service quality, as shown in Figure 1.
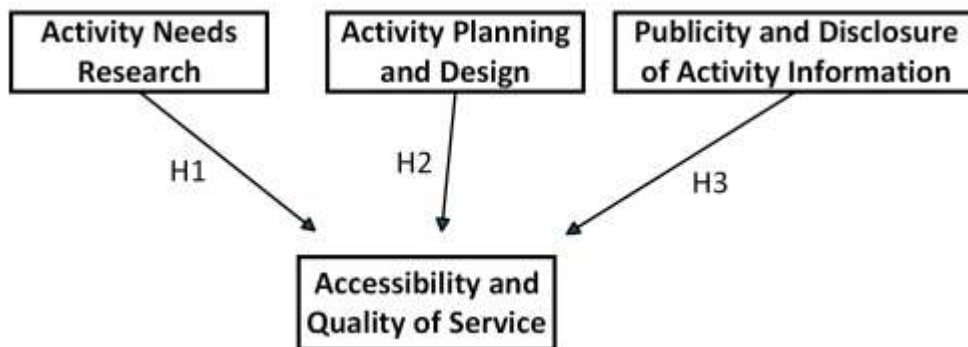

Figure 1 Factors affecting service quality accessibility

Multiple linear regression was used to verify the relationship between their effects. The regression model is:

$$y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3$$

Where y is the dependent variable, i.e., the overall accessibility of service quality, x_1, x_2, x_3 is the independent variable, which is the research on the demand for the event, the production and design of the event, and the public dissemination of information about the event, β_0 is the constant term, and , β_1, β_2 β_3 are the partial regression coefficients.

(2) Analysis of linear regression results

Table 16 Linear regression analysis

mould	Non-standardized coefficient		standardized factor	t	significance	VIF
	B	standard error	beta			
(Constant)	0.781	0.364		2.141	0.037	
Research on the demand for activities	0.214	0.074	0.219	2.767	0.007	1.632
Production design of the event	0.565	0.097	0.507	6.051	0	1.807

Activity information publicity	0.124	0.085	0.125	1.459	0.148	1.98
	R²				0.549	
	F				47.671	
	P				0	

a. Dependent variable: overall match between supply and demand

As shown in Fig.16, according to the results of the multiple linear regression, it can be seen that the fit of this linear regression model is better, $R^2 =0.549>0.3$, which indicates that the independent variable explains 54.6% of the total variance of the dependent variable, which means that the results of this arithmetic can realistically reflect the influence of the research on the demand for the activity, the design of the production of the activity, and the public publicity of the information about the activity on the degree of satisfaction of the demand for the service.

The VIFs of the independent variables are all less than 5, indicating that there is no multicollinearity among the four independent variables.

The regression equation is significant, F=47.671, p<0.001, indicating that at least one of the three independent variables can significantly affect the level of satisfaction of the dependent variable.

The p-values of activity demand research and activity production design are less than 0.05 and B is positive, indicating that activity demand research and activity production design can significantly and positively influence the level of service demand satisfaction; activity information disclosure and publicity cannot significantly influence the level of demand satisfaction (p=0.148> 0.05).

Finally, the following regression equation is derived between the variables:

Overall accessibility of service quality = 0.781 + 0.214* campaign demand research + 0.565* campaign production design

Table 17 One-sample t-test

	number of people	Average (E)	standard deviation	T	P
Demand research for activities	183	4.51	1.356	3.657	.000
Production design of the event	183	4.79	1.157	7.715	.000

From the analysis of single-sample t-test in Fig.17, it can be seen that at the 0.05 level of significance, the mean values of the activity demand research and the production design of the activity are 4.51 and 4.79, respectively, (equivalent to 6.5 and 6.8 out of 10 points converted), with a p-value of 0 less than 0.05, which is highly significant. It indicates that the public's matching of supply and demand for the activity demand research and activity production design of cultural centers is average, and the activity demand research and production design need to be strengthened.

From the results of supply and demand matching degree analysis, it can be seen that the service supply and public demand of Y city cultural center show a medium matching state in general, but there is still much room for improvement to reach the very matching level. The respondents also said that the services of the cultural center can basically meet their needs at this stage, but it would be better if the services can be further improved. In terms of specific indicators, the matching degree of personnel security is the highest, the matching degree of cultural facilities and service effect is in the middle, and the lower matching degree is for cultural activities and organization and management. Under each level of indicators, the number of facilities, the area of venues, the number of personnel, the collection of cultural needs, the publicity of information, the number of types of activities, the digital cultural resources, the frequency of activities, and the popularization of cultural knowledge and skills are the second-level indicators that need to be strengthened. focused on strengthening. From the analysis of the factors influencing the accessibility of service quality, it can be seen that individual characteristics such as age, education and occupation are proven to be important internal factors influencing the degree of accessibility of service quality. Therefore, cultural centers need to take into full consideration the specific needs of different age, educational and occupational groups when providing services in order to provide more targeted services. Activity demand research and activity production design in the supply process are also seen as key factors affecting the accessibility of service quality. Currently, the work of cultural centers in these two areas has not yet fully met the needs of the public, and they should strengthen the research of activity needs to gain a deeper understanding of the expectations and needs of the public, and at the same time improve the

level of activity production and design, so as to ensure that the services provided are more closely related to the actual needs of the public.

V.　　CONCLUSION AND DISCUSSION

Taking the cultural center of Y city as the research object, this study deeply explores the accessibility of its public cultural service quality and its influencing factors, reveals the current situation and problems of the cultural center in matching supply and demand, and puts forward targeted suggestions. The results of the study show that the service quality of cultural centers in City Y in general shows a medium match with public demand, but there is still much room for improvement. Specifically, the matching degree of staff service quality is the highest, while the matching degree of cultural activities and organizational management is lower, especially in the areas of cultural demand collection, information publicity, number of types of activities, and digital cultural resources, which need to be strengthened. In addition, individual characteristics (e.g., age, education, and occupation) have a significant effect on service quality accessibility, while activity demand research and activity production design are key supply factors affecting service quality accessibility.

Based on the above findings, this study puts forward the following suggestions to improve the accessibility of the service quality of the cultural centers in City Y: firstly, establish a demand-oriented service supply mechanism, and provide cultural services based on demand, so as to prevent the products and services provided from being detached from the actual needs of the public, which may result in the lack of effectiveness of the supply. although the cultural centers in City Y have already set up demand feedback channels such as opinion boxes, demand collection channels on the website, satisfaction surveys, telephone feedback, and demand expression at centers, there is a lack of a regularized demand survey mechanism. Satisfaction survey, telephone feedback and demand expression in the center and other demand feedback channels, but the lack of regularized demand survey mechanism, for the demand for the initiative of the collection of opinions is insufficient, the process of service supply is still dominated by the traditional top-down supply. In this regard, it is necessary to establish a bottom-up demand expression mechanism, survey and collect the public's cultural demand through regular hearings and online questionnaires, take the public's opinion as an important reference for decision-making on public cultural services, plan activities that are the most enjoyable and popular among the public, and increase the frequency of the activities, so as to enable more members of the public to have the opportunity to participate in the activities and obtain greater public benefits. The frequency of activities should be increased so that more people have the opportunity to participate in the activities and obtain greater public benefits. At the same time, we should pay attention to the satisfaction survey of the service results and carry out evaluation and feedback of the service to understand the public's evaluation of the quality of the activities and further demand for expression, so as to facilitate the subsequent optimization and improvement of the activities, forming a virtuous cycle from the demand survey to the evaluation and feedback and then to the further survey; secondly, we should increase the investment in facilities and resources, and, according to the internal management personnel of the Cultural Center of Y City, the Cultural Center will regularly maintain, repair, maintain, and repair the facilities and equipments in the cultural center. According to the internal management of Y city cultural center, the cultural center regularly maintains and repairs its facilities and equipment, and during the epidemic period, due to the decrease in the number of people entering the cultural center, the existing facilities were able to meet the needs of daily use. However, under normal opening conditions, the facilities and equipment appear to be in short supply, and the area of the venue is not spacious enough to fully meet the public's needs for cultural activities; in terms of personnel input, the cultural center currently has close to 60 staff members, and this staff size can basically meet the daily operational needs under the condition that the existing venue area is small. Moreover, these staff members are highly specialized, and most of them are recruited through civil service recruitment, military transfer and other ways to work in the cultural center, and the new staff members need to be dispatched to the institutions similar to the cultural center for internships and trainings before they can be formally assigned to the service. According to the results of the questionnaire survey, the public generally believes that the number of facilities, the area of space and the number of staff in cultural centers do not quite meet their needs. Therefore, in the context of building new centers and expanding the area of cultural centers, cultural centers should invest in facilities and equipment and the number of staff corresponding to the size of the centers, so that the public can have a better and more convenient experience in the process of enjoying cultural services; thirdly, to provide characteristic and personalized cultural services, according to the results of the questionnaire survey, there are significant differences in the degree of match between the supply of and demand for public cultural services for people of different age groups, academic qualifications and occupations. significant differences. It is not difficult to understand that different individuals have different needs for culture, and the same individual will have different needs in different age groups and educational levels, which requires that cultural centers cannot carry out one type of activity in a uniform manner, but rather innovate the content of activities and carry out characteristic and personalized activities, so that the public cultural services can benefit the old, the middle-aged, and the young of all ages as much as

possible. y city cultural center currently opens a middle-aged art festival which is popular among the senior citizens and the elderly. The City Culture Center of Y currently offers the Middle-aged and Elderly Art Festival, the Chorus Festival, and the Everybody's Music Stage, which are popular with the elderly; yoga, flower arrangement, and handicraft classes are popular with the middle-aged; and for teenagers, there are children's Chinese painting classes, children's brush calligraphy classes, and parent-child activities, etc., while the activities for the youth group are only movie appreciation and band performances, which are relatively few in variety. This is partly due to the fact that young people have more ways to get in touch with culture, and cultural centers are only one of those ways, so the number of young people coming to the centers is relatively small. Another important reason is that the services of cultural centers are not attractive enough to young people and lack a deep understanding of their cultural preferences. As a matter of fact, young people also have a strong demand for public cultural services, and they show a relatively strong interest in traditional fine culture, such as the "Hanfu fever" that has recently arisen among young people, which is a manifestation of young people's concern for and confidence in traditional culture. One of the functions of the cultural center is to publicize the traditional culture of our country, and young people are one of the indispensable and influential groups, so the cultural center needs to increase innovation in the form of display, enrich the types of activities for young people, attract more young people to pay attention to the traditional culture, and jointly inherit and carry forward the excellent traditional culture of China; Fourthly, it is to increase the construction of the digital cultural center and publicity efforts, and the development of the digital cultural center is a good way to promote the traditional culture of our country, and to promote the traditional culture of our country. In the era of interconnection and interoperability of all things, the development of digital cultural center is the trend of the times. Digital cultural centers put cultural resources at your fingertips, accelerating the realization of public cultural equalization. city Y cultural center has developed a series of digital cultural resources, such as the online catechism cultural learning platform and microclassroom video learning in the WeChat public number. 2020 also further expanded the publicity channels, opening video accounts such as TikTok and BiliBili, for the public to watch and learn about all kinds of cultural activities and performances. Up to now, the number of followers of the Jittery Voice account of the Culture Center in City Y is more than 6,000, and the number of followers of the Beili Beili video account is only more than 400, indicating that the publicity channels of the digital culture center are not yet known by the general public, and that the Culture Center needs to increase the promotion and publicity of the digital media accounts so that the public at a remote distance can also enjoy the same high-quality cultural resources; and lastly, to increase the propaganda of the information of the cultural events and activities. Through field interviews with residents of Community C around the cultural center, it was learned that basically all the interviewees did not know what activities were being held by the cultural center, and some residents even did not know that the cultural center was free and open to the public. For their part, the staff of the cultural center said that they basically do not go to the community to publicize cultural activities, but generally post information about the activities inside the center and at the entrance, relying on people passing by or interested in the activities to come into the center on their own initiative to learn about the activities. Although websites and WeChat public numbers have become common channels for cultural centers to publicize their activities, it is clear that these methods do not reach all groups, especially the elderly who do not use cell phones and have little access to information about activities. The results of the questionnaire survey further confirm the seriousness of this problem. Among the 192 sample subjects, as many as 77.6% of the respondents thought that the publicity efforts of cultural centers were insufficient. People who have experienced the services of cultural centers will continue to pay attention to the activities of cultural centers, while groups who have not experienced them miss out on many activities due to the lack of opportunities to be publicized. In the long run, this lack of publicity will lead to a fixed group of recipients of the cultural center's services, which will not be able to effectively attract new audiences, much less reach a wide range of citizens. This runs counter to the idea of focusing on the needs and interests of citizens as advocated by the new public service theory. Therefore, it is necessary for cultural centers to increase offline publicity channels, put activity information in the community and public cultural activity areas near the cultural center, such as cultural plazas, community cultural stations and other public cultural activity areas, and display the latest activity dynamics of cultural centers to the public visually by hanging banners, posters, setting up bulletin boards, etc., so as to expand the scope of publicity of cultural information, and to make the cultural services more in place.

The main contribution of this study is to construct a comprehensive evaluation index system for the service quality of cultural centers, and to provide a new method and theoretical support for the quantitative assessment of the accessibility of the service quality of cultural museums through empirical analyses, as well as to provide practical guidance for the optimization of the resource allocation and service supply of public cultural service institutions. In the future, with the rapid development of digital technology and the constant changes in social and cultural needs, further research on how cultural centers can use emerging technologies to optimize service supply, improve service precision and enhance public participation will provide new ideas and directions for the high-quality development of public cultural services.

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